Defense Information Systems Agency
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DSO Spectrum Professional Development Program

E3 Engineering Division
13 December 2011

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Disclaimer

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PURPOSE

- Provide an update on the status of the development and implementation of the Spectrum Professional Development Program
- Determine requirements for Senior Champion concurrence
- Update from MPS on progress
- Pursue introduction of formal training in DOD organizations outside DSO

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PURPOSE
& CLARIFICATION

- **Provide status of the development and implementation of the DSO Spectrum Professional Development Program**
- **Pursue introduction of formal training in DOD organizations outside DSO**

- **NOT a replacement to the current military path for Spectrum Management**

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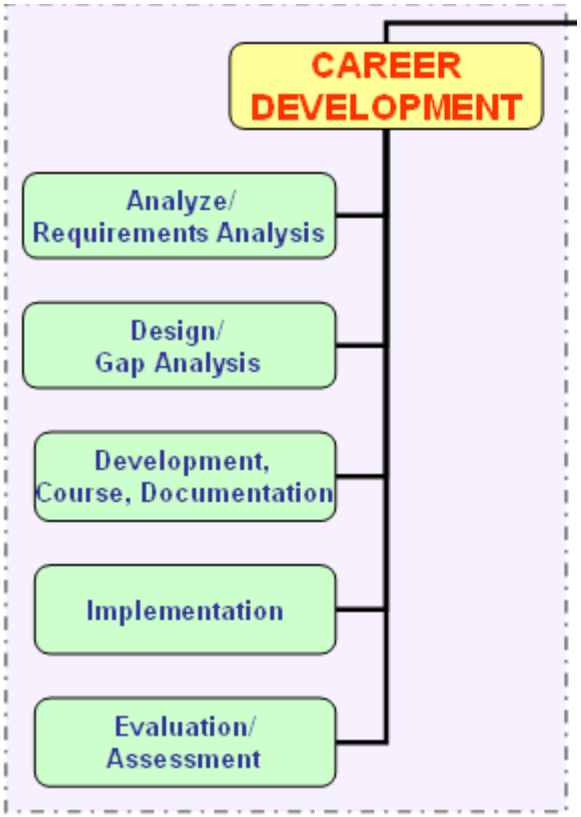
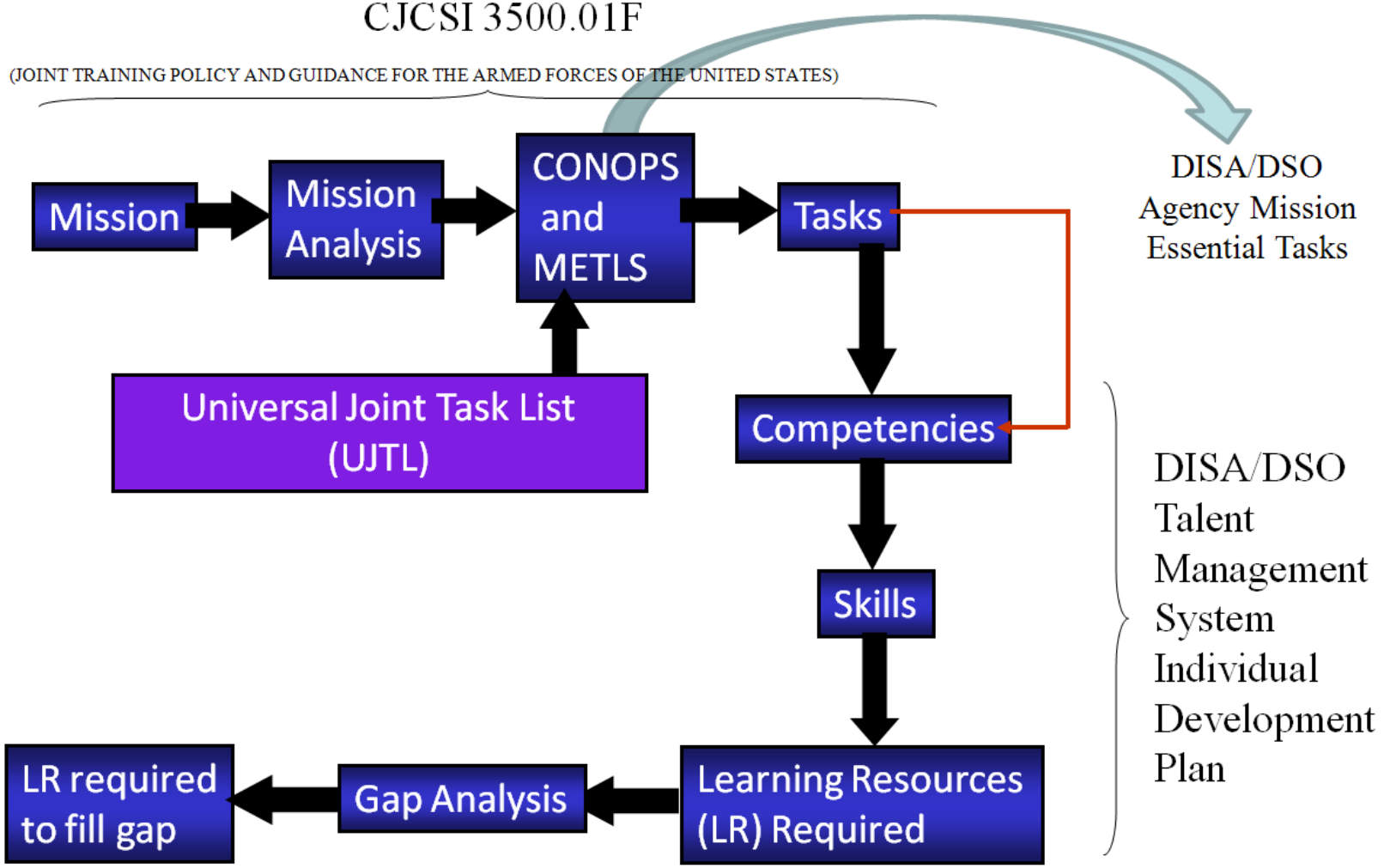
CAREER DEVELOPMENT PROGRAM

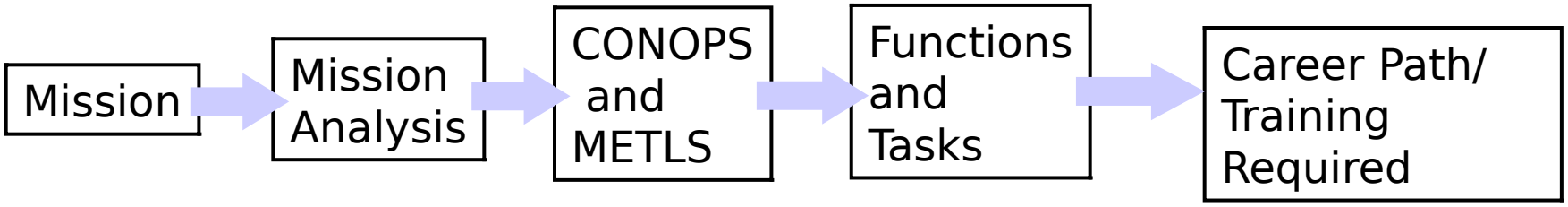


- Formalized educational plan for EM Spectrum community
- Mission Essential Task-based to Support DSO Mission
- Path for career progression
  - Course development
  - Potential elements
- Training opportunities

CJCSI 3500.01F

(JOINT TRAINING POLICY AND GUIDANCE FOR THE ARMED FORCES OF THE UNITED STATES)





Training Aligned to Requirements (DODD 1322.18)

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PLAN

Requirement

- **Support the DOD/DISA/DSO mission to provide electromagnetic spectrum services**
  (per DODI 5000.02, DODI 4650.01, DODD 3222.3/DODI 3222.03)

Goal

- **Develop and implement program to train and educate all members of the spectrum and E3 communities**

Objectives

- **Ensure a minimum level of technical competency for various professional levels for personnel in the DOD EM Spectrum community**
- **Define general training and educational requirements for Spectrum- and E3-related career paths**
- **To develop the material necessary to achieve the goals and objectives**

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Spectrum Professional Development Plan:

Development of the Matrix

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Defense Spectrum Organization

DISA MET 5

DISA MET 5: Provide electromagnetic spectrum planning, coordination, deconfliction, and management services to enable DoD global operations.
5.1 Perform spectrum management strategic planning and recommend policy to support DoD global spectrum access.
5.2 Perform analyses supporting DOD worldwide access to spectrum and conduct evaluations to support DOD'S effective use of spectrum
5.3 Provide spectrum supportability planning and policy development for DOD.
5.4 Conduct evaluations of emerging spectrum technologies.
5.5 Provide operational spectrum management and frequency deconfliction support for operations and exercises.
5.6 Develop, maintain and make available an operational Joint spectrum management system and supporting spectrum engineering data for combat operations.
5.7 Provide technical electromagnetic environmental effects (E3) and spectrum engineering support upon request from the Combatant Commands, their components and the Military Services.
5.8 Coordinate submission and defense of DoD space systems filings within the National and International processes to assure access to orbital locations for geosynchronous satellite networks and spectrum access for geosynchronous satellite networks and non-geosynchronous systems.

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DESCRIPTION OF AMETs

Example (5.1)

5.1 Perform spectrum management strategic planning and recommend policy to support DoD global spectrum access.

- **Development and update of the DoD Electromagnetic Spectrum Management Strategic Plan**
- **Coordination for DoD Implementation Plan submissions**
- **Developing, maintaining, updating the Defense Spectrum Management Architecture (DSMA)**
- **Developing, maintaining, updating the Department's biennial strategic planning submission in support of national spectrum policy initiatives**
- **Developing, coordinating, and representing DoD positions for international, regional, and national spectrum forums**

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SKILLS BREAKDOWN

Sample

5.1 Perform spectrum management strategic planning and recommend policy to support DoD global spectrum access.

- Defense Spectrum Management Architecture (DSMA) Fundamentals
- Enterprise Architecture
- Architecture Development Tools
- Strategic Planning Fundamentals
- Knowledge of the Defense Information Enterprise Architecture (DIEA)
- Strategic Planning (SM Regulation and Policy)
- Joint Spectrum Planning
- Spectrum systems and technologies
- Spectrum Management Policies and Procedures - Basic
- Spectrum Dependent System (SDS) procurement
- Joint operational Concepts
- Spectrum Data and Tools

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DESCRIPTION OF AMETs

Example (5.4)

5.4 Conduct evaluations of emerging spectrum technologies.

- **Evaluate emerging spectrum technologies for possible impacts or benefits to DoD**
- **Conduct an emerging spectrum technology outreach program with government, industry and academia**

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DSO Competencies (Skills)

5.4 Conduct evaluations of emerging spectrum technologies.

- Legacy RF Systems
- Monitor Technology Developments
- Technology Risk Assessment
- EST Outreach

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Spectrum Professional Development Plan

5.1 Perform spectrum management strategic planning and recommend policy to support DoD global spectrum access

- Defense Spectrum Management Architecture Fundamentals
  - Knowledge and understanding of spectrum management principles, business processes, systems and organizations. Ability to maintain and update the DoD DSMA
    - Attend National Telecommunications and Information Administration architecture development training (E)
      - http://www.ntia.doc.gov/osmhome/training/spman.html

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Spectrum Professional Development Plan

5.2 Perform analyses supporting DOD worldwide access to spectrum and conduct evaluations to support DOD'S effective use of spectrum

- **Configuration Management**
  - **Configuration Management Knowledge of Data/Metadata Management**
    - **Univ of Houston: E2, I2, S2 - Configuration Management Principles and Implementation Certification**
      - **http://www.cmpic.com/1-4.htm**
- **Data Modeling Techiques**
  - **Knowledge of Data Modeling Principles, Tools, and Techniques**
    - **Data Modeling Training (S);**
      - **http://www.stevehoberman.com/DataModelingMasterClass.htm**

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WAY AHEAD

- Additional resources needed to conduct extensive Gap Analysis and to fill Plan gaps
- Ongoing maintenance and review to ensure Plan content accuracy and link currency
- Institute feedback system to add or delete training a necessary
- Contacts and resources needed to pursue development of University-level courses and/or relevant degree programs
- Process/mechanisms to introduce formal training in DOD organizations

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